

# PUBLIC HEALTH FACT SHEET

## Rocky Mountain Spotted Fever

Massachusetts Department of Public Health, 305 South Street, Jamaica Plain, MA 02130

### What is Rocky Mountain Spotted Fever (RMSF)?

Rocky Mountain Spotted Fever (RMSF) is a disease caused by the bacteria, (a type of germ), *Rickettsia rickettsii*.

### How is RMSF spread?

RMSF is spread by the bite of an infected tick, primarily the dog tick in the northeastern part of the country. The tick must attach to the skin and feed on blood for at least 4-6 hours in order for the tick to spread the bacteria.

### How common is RMSF in Massachusetts?

RMSF is not very common in Massachusetts. Between 1990-2000, a total of 34 cases was reported. The disease is most often reported from Cape Cod and the surrounding islands, although some cases have occurred in central Massachusetts.

### What are the symptoms of Rocky Mountain Spotted Fever?

Symptoms usually include a sudden onset of fever, severe headache, deep muscle pain, nausea and vomiting, and less frequently may include stomach pain and cough. Most people develop a rash on their arms and legs. This rash can spread to the palms, soles, and over the rest of the body.

### How soon do symptoms appear after a tick bite?

Symptoms start to appear between 2 and 14 days after a tick bite, with an average of about one week.

### Is there treatment for Rocky Mountain Spotted Fever?

RMSF can be treated with antibiotics; however, very serious complications including death can occur if the disease is not treated early.

### What can you do to protect yourself?

Dog ticks are most numerous along roadsides, paths, and trails in brushy woodlands or meadows with tall grass or weeds, and marshy areas. Dog ticks are most active during the months of April through September.

If you live in or visit an area likely to have dog ticks, take the following precautions:

- Wear a long-sleeved shirt and long pants, and tuck your pant legs tightly into your socks. (Light colors will help you spot the ticks on your clothes before they reach your skin.)
- Stay to the middle of paths when walking or hiking.
- Talk to your veterinarian about the best way to protect your pets against ticks.
- Use a repellent on exposed skin that contains the active ingredient DEET (the chemical N-N-diethyl-meta-toluamide). Always follow the directions on the label. DEET can be poisonous if overused. Avoid using repellents with DEET concentrations above 10-15% for children and with concentrations above 30-35% for adults. Do not apply repellents to the hands or faces of young children. Repellents should never be used on infants. Cream, lotion or stick formulas with low amounts of alcohol are best

for use on the skin. The insecticide, permethrin, can also be used to protect against ticks. This chemical, which kills ticks on contact, can only be used on clothing.

- Make the area around your home less attractive to ticks by removing leaf litter and brush, mowing lawns regularly, and trimming low-lying bushes. Keeping woodpiles and birdfeeders off the ground and in sunny areas away from your home can help keep away rodents that may have ticks on them. If you use pesticides around your home, always follow the label instructions and never use pesticides near streams or other bodies of water.
- Check yourself, your children, and your pets for ticks every day. Adult dog ticks are reddish brown in color with white markings on the upper body surface. They are about ¼ inch in length. Their favorite places to attach are on the legs, in the groin, in the armpits, along the hairline, and in or behind the ears.
- Remove any ticks promptly using fine point tweezers. Do not use your bare fingers to remove a tick. Grasp the tick as close to the skin as possible and, without squeezing or twisting, pull the tick straight out with steady pressure. Once removed, disinfect the area with rubbing alcohol.
- Know the symptoms of RMSF. If you have been someplace likely to have ticks between April and September and you develop RMSF symptoms, see a doctor right away.

### **Where can I get more information?**

- Your doctor, nurse, or clinic
- Your local board of health (listed in the telephone directory under “government”)
- Massachusetts Department of Public Health, Division of Epidemiology and Immunization (617) 983-6800 or toll-free at (888) 658-2850 or on the MDPH website at <http://www.mass.gov/dph>
- Massachusetts Poison Control Center (concerning adverse reactions to insect repellents or other pesticides) (617) 232-2120 (Boston) or 1-800-682-9211 (other areas in Massachusetts) or 1-888-244-5313 (hearing impaired)

July 2001